

THE LANCET

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

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SUPPLEMENTARY APPENDIX

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Figure S1. (a, b) Tsimane community meetings during Phase I; (c) A blockade aimed at preventing non-Tsimane from entering a Tsimane community; (d) Delivery of salt and soap to be used to aid in quarantining of suspect COVID-19 cases. Photo credit: THLHP team.

Appendix 2.1. Organizational structure for local collaborations for Tsimane COVID-19 prevention efforts

INSTRUCTIONS FOR STRUCTURE AND FUNCTIONS OF THE TSIMANE LOCAL SURVEILLANCE COMMITTEE FOR THE CORONAVIRUS EPIDEMIC

PARTNERS OF THE CORONAVIRUS CONTROL SURVEILLANCE PLAN IN TSIMANE COMMUNITIES

- GRAN CONSEJO TSIMANE, represented by Mr. Maguin Gutierrez Cayuba.
- TSIMANE HEALTH AND LIFE HISTORY PROJECT, represented by Drs. Hillard Kaplan, Michael Gurven, Jonathan Stieglitz, and Benjamin Trumble.
- BIOLOGICAL STATION OF BENI, represented by Ms. Carola Vaca
- MEDICAL SOLIDARITY FOUNDATION (CANARY ISLANDS), represented by Dr. Sergio Bejarano

COMPOSITION OF THE SURVEILLANCE TEAM

- a) Village chief.
- b) Representative of the elderly.
- c) Representative of women.
- d) Representative of the Tsimane Health and Life History Project.
- e) Representative of the Gran Consejo Tsimane.

FUNCTIONS OF THE SURVEILLANCE TEAM

- a) Implement internal regulations of the community for handling suspicious cases.
- b) Direct the construction of the quarantine environment for probable contacts and suspicious cases.
- c) Define the conditions of contact with a suspected case and probable contacts.
- d) Coordinate with any local health centers and the mobile medical team of the Tsimane project to report cases and contacts.
- e) Hold meetings with the community to report and coordinate activities during the epidemic.

OPERATIONAL DEFINITIONS

Definition of a suspected case.

- Once the epidemic has started, a person with a cough and fever with or without breathing problems and who is coming from an area that has already reported confirmed cases of COVID- 19 will be considered a suspected case.

Definition of probable contact.

- Anyone from an active COVID-19 epidemic zone.

QUARANTINE

Who will enter quarantine?

- Individuals who meet the definition of a suspected case and probable contact.

What will quarantine consist of?

- Quarantine will consist of separating suspected cases and probable contacts from the rest of the community. For this, they will be provided with an environment to rest as well as giving them utensils (for example, a plate, spoon, cup) so that their family

members can deliver their food while they are separated. They will also be given detergent to wash hands, clothes, and kitchen utensils.

Quarantine duration time

- Potential contacts should be quarantined for observation for twelve days to see if they have symptoms; if they do not have symptoms they can join their family and community. Suspicious cases should receive medical attention (from the nearest health center) and should be quarantined until their symptoms subside. They will be provided with the necessary food and medication during their illness, as well as daily evaluations to see the progression of the illness and the need for transfer to more specialized health centers.

SUPPLIES FOR EACH SURVEILLANCE COMMITTEE

- a) Detergent, plate, spoon and cup for suspected cases.
- b) First aid kit for the community.
- c) Supplies needed for coordinating with local health centers, to prevent patients with first-level treatable diseases from going to San Borja.

Appendix 2.2. Sample script from Tsimane community meeting during Phase I (English).

Introduction.

We are in a special situation, since we have a disease called COVID-19. This disease started in China in December 2019. It then spread to several countries and continents, and currently this disease is killing hundreds of people per day in many countries. More than 170,000 people have died worldwide from COVID-19. The most important thing to mention is that the disease is already in Bolivia; we have hundreds of cases in Bolivia, which is precisely why we are having this meeting.

What is COVID-19 and coronavirus?

COVID-19 is a respiratory disease that can be contagious, just like a cold. COVID-19 is caused by a virus called coronavirus. Currently, there is no vaccine or medication to prevent or cure COVID-19.

There is greater risk in contracting the disease for people over 50 years of age, people with diabetes-based diseases, hypertension, kidney disease, heart disease, and those who are immunosuppressed, anemic and malnourished.

How is coronavirus spread?

The virus likely started in an animal other than humans, but it is now spreading from person to person. The virus is believed to spread mainly between people who are in close contact with each other (within one meter distance), through droplets that are produced when an infected person coughs or sneezes. It could also be possible for a person to contract COVID-19 by touching a surface or object that has the virus and then touching their mouth, nose, or possibly their eyes, as it has been shown that a person may touch their face more than 100 times a day. These droplets can fall on plates, glasses, or other plastic, metal or wooden things; in them the virus can live for at least a day, and maybe more. A healthy person can thus become infected with the virus by touching those infected things and putting their hands to their mouths. It is important to wash your hands with soap before eating or before putting your hand to your mouth or eyes.

What are the symptoms of COVID-19?

COVID-19 patients have had mild to severe respiratory disease with the following symptoms:

- fever greater than 38°C
- dry cough
- difficulty breathing
- In the event that a case is complicated it can present: pneumonia (infection) in both lungs, failure of one or multiple organs, or death.

What can I do to avoid this disease?

- Avoid close contact with sick people.
- Avoid touching your eyes, nose, and mouth with your unwashed hands.
- Wash your hands frequently with soap and water for at least 20 seconds. If possible you can also use a hand sanitizer that contains at least 60% alcohol (if soap and water are unavailable).

What should I do if I feel sick?

- Stay at home so as not to infect others.
- Cover your nose and mouth with your elbow crease or disposable tissue when you cough or sneeze and then throw it away.
- Clean and disinfect frequently touched objects and surfaces.

What is quarantine?

Quarantine is a measure of social isolation that serves to prevent the spread of coronavirus infection.

How can quarantine prevent transmission?

When a person comes from an area where the epidemic has been confirmed, he or she can then develop the disease within 6-10 days. It is asked that this person be isolated for 14 days, to see if he/she has the infection or not. If you have the infection, you must remain under treatment and isolated for up to 30 days. If you don't have the infection then you can rejoin the community again. In this way we prevent an infected person from entering the community and spreading it to others.

Why is isolation important?

- Because there is still no vaccine to prevent coronavirus.
- Because a person infected at the beginning (in the first 6-10 days) may not show any disease symptoms, but is highly contagious.

Appendix 2.3. Sample scripts for radio messages during Phase I (English).

Script 1

URGENT: Coronavirus and COVID-19 have arrived to Bolivia.

Coronavirus disease has reached Bolivia. The disease originally came from China, and has now spread to countries all over the world. The disease can decimate the lungs, and no treatment has come out yet. This disease is very dangerous and contagious. Many have already died of this disease.

It starts with fever, dry cough, and sore throat. Your throat and chest feel squeezed, and you can't breathe. It is dangerous for all people: for children, young and old, but it is more dangerous for those over 60 years old.

This disease is more dangerous for those who already have other diseases such as tuberculosis, diabetes, high blood pressure, anemia, malnutrition and other diseases of the lungs. Therefore, our Tsimane population is at high risk.

Although our Tsimane population has suffered from infectious diseases in the past, this disease is very contagious, moreso than other diseases you may have experienced or heard of, and more lethal once infected. You can catch it when you are near a sick person. The disease lives in saliva. When you talk, cough or sneeze, you emit this saliva. In that saliva, there are very small droplets that cannot be seen and the virus lives there. If a droplet reaches your eyes, nose or mouth, you can get the virus and the disease.

In the same way, if that sick person grabs a plate, cup, or anything else, the disease stays in those things. So, healthy people -- when they greet the sick person, or when they touch those things of the sick person that have been contaminated with those tiny droplets -- they themselves can catch the disease.

In the first 6-10 days, the coronavirus enters your body and you can be sick for up to three weeks, if you do not die sooner.

You should seek help: contact the community chief, so that they contact a Tsimane Health and Life History Project member (for example, by phone or radio) to receive help.

Script 2

What can be done to avoid having a coronavirus infection?

If you know of someone who has come from a place where there is an epidemic such as Santa Cruz, Cochabamba or La Paz and is with a cough, cold or sore throat:

- Avoid approaching them (that is, stay >3 meters away) while talking to that person.
- Wash your hands for 20 seconds before touching your mouth, nose and eyes.

If you are sick with a cough, cold or sore throat and have come from a place where there is an epidemic such as Santa Cruz, Cochabamba or La Paz, then you should:

- Stay separated from your family and the rest of the community for two weeks until disease symptoms disappear.
- Cover your nose and mouth when you cough or sneeze with a cloth or your arm.
- Clean any objects that you grasp.

What can my community do to prevent the infection from coming?

Do not let people who come from other places where the epidemic already exists into your community, regardless of whether they are family members, friends or acquaintances.

What happens if those people enter?

- A separate house should be built where they stay for two weeks; if they do not develop signs of the illness, then they can enter the community.

What if there is a person with coronavirus in my community?

- Another separate house must also be built, as there must be two weeks until the disease subsides.
- The patient must have their own plate, cup and spoon, mosquito net and clothes, place to go to the bathroom, and soap for washing their body, dishes and clothes. If they can cook for themselves then they can be provided with food to cook; if they cannot cook for themselves, then they must be served on their plate. The caregiver must be careful not to contract the disease, for example, by always washing their hands after providing food for the patient.
- Finally, if for some reason the disease reaches the community, then those residents who are healthy - especially the elderly - should leave the community until the disease is gone.